

Patent Marking Lists for Cree® LED Components

High-Brightness LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 8,049,230	Pat. 8,350,370	Pat. 8,487,326	Pat. 8,669,565	Pat. 8,901,583
Pat. 9,054,253	Pat. 9,112,083	Pat. 9,240,395	Pat. 9,461,217	Pat. 9,634,209
Pat. 9,685,592	Pat. 9,722,158	Pat. 9,831,393	Pat. RE46,588	Pat. RE46,589
Pat. D684,545	Pat. D691,100			

XLamp® CXA and CXB LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 8,669,573	Pat. 8,895,998	Pat. 9,000,470	Pat. 9,054,253	Pat. 9,112,083
Pat. 9,640,737	Pat. 9,660,153	Pat. 9,673,363	Pat. 9,754,926	Pat. RE46,588
Pat. RE46,589	Pat. D712,850	Pat. D721,339		

XLamp® MC-E LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,655,957	Pat. 7,659,551	Pat. 7,692,182
Pat. 7,704,763	Pat. 7,960,819	Pat. 8,044,418	Pat. 8,193,547	Pat. 8,378,374
Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,112,083	Pat. 9,159,888
Pat. RE46,588	Pat. RE46,589	Pat. D582,866	Pat. D594,827	

XLamp® MHB and MHD LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 8,167,463	Pat. 8,622,582	Pat. 9,054,253	Pat. 9,112,083	Pat. 9,691,949
Pat. RE46,588	Pat. RE46,589			

XLamp® MK-R LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 8,039,859	Pat. 8,167,463	Pat. 8,217,412	Pat. 8,608,349	Pat. 8,622,582
Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850	Pat. 9,112,083
Pat. 9,159,888	Pat. 9,627,361	Pat. RE46,588	Pat. RE46,589	Pat. D658,139
Pat. D615,504				

XLamp® MK-R2 LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920	Pat. 7,446,345
Pat. 7,473,938	Pat. 7,692,182	Pat. 7,808,013	Pat. 7,943,952	Pat. 8,039,859
Pat. 8,167,463	Pat. 8,217,412	Pat. 8,608,349	Pat. 8,957,430	Pat. 9,041,042
Pat. 9,054,253	Pat. 9,070,850	Pat. 9,093,616	Pat. 9,112,083	Pat. 9,640,737
Pat. 9,660,153	Pat. 9,673,363	Pat. 9,754,926	Pat. 9,831,220	Pat. RE46,588
Pat. RE46,589	Pat. D615,504	Pat. D656,906	Pat. D658,139	Pat. D671,661

XLamp® ML-B LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 8,269,244
Pat. 8,896,008	Pat. 9,054,253	Pat. 9,112,083	Pat. RE46,588	Pat. RE46,589
Pat. D615,504	Pat. D648,686	Pat. D659,657		

XLamp® ML-C and ML-E LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 8,269,244	Pat. 9,054,253	Pat. 9,112,083	Pat. RE46,588	Pat. RE46,589
Pat. D648,686	Pat. D659,657			

XLamp® MP-L EasyWhite® LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,821,023
Pat. 8,039,859	Pat. 8,167,463	Pat. 8,217,412	Pat. 8,608,349	Pat. 8,622,582
Pat. 8,766,296	Pat. 8,896,008	Pat. 9,070,850	Pat. 9,054,253	Pat. 9,112,083
Pat. 9,159,888	Pat. RE46,588	Pat. RE46,589	Pat. D582,866	Pat. D656,906
Pat. D671,661				

XLamp® MT-G LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 8,039,859	Pat. 8,167,463	Pat. 8,217,412	Pat. 8,608,349	Pat. 8,622,582
Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850	Pat. 9,112,083
Pat. 9,159,888	Pat. RE46,588	Pat. RE46,589	Pat. D615,504	Pat. D658,139

XLamp® MT-G2 EasyWhite® LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920	Pat. 7,446,345
Pat. 7,473,938	Pat. 7,692,182	Pat. 7,808,013	Pat. 7,943,952	Pat. 8,039,859
Pat. 8,167,463	Pat. 8,217,412	Pat. 8,608,349	Pat. 8,957,430	Pat. 9,041,042
Pat. 9,054,253	Pat. 9,070,850	Pat. 9,093,616	Pat. 9,112,083	Pat. 9,640,737
Pat. 9,660,153	Pat. 9,673,363	Pat. 9,754,926	Pat. 9,831,220	Pat. RE46,588
Pat. RE46,589	Pat. D615,504	Pat. D656,906	Pat. D658,139	Pat. D671,661

XLamp® MX-3 LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 7,923,739	Pat. 8,269,244	Pat. 8,497,522	Pat. 9,054,253	Pat. 9,112,083
Pat. RE46,588	Pat. RE46,589	Pat. D621,799	Pat. D635,527	Pat. D641,719

XLamp® MX-6 LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 7,923,739	Pat. 8,269,244	Pat. 8,497,522	Pat. 9,054,253	Pat. 9,112,083
Pat. RE46,588	Pat. RE46,589	Pat. D621,799	Pat. D635,527	Pat. D641,719

XLamp® XB-D LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 7,692,209	Pat. 7,808,013	Pat. 7,858,998	Pat. 7,943,952	Pat. 8,039,859
Pat. 8,167,463	Pat. 8,608,349	Pat. 8,622,582	Pat. 8,957,430	Pat. 9,054,253
Pat. 9,070,850	Pat. 9,093,616	Pat. 9,112,083	Pat. 9,640,737	Pat. 9,660,153
Pat. 9,673,363	Pat. 10,008,637	Pat. RE45,517	Pat. RE46,588	Pat. RE46,589
Pat. D615,504	Pat. D656,906	Pat. D671,661		

XLamp® XB-H LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,608,349	Pat. 8,622,582
Pat. 8,766,296	Pat. 8,803,201	Pat. 8,866,169	Pat. 8,896,008	Pat. 9,012,938
Pat. 9,054,253	Pat. 9,070,850	Pat. 9,105,824	Pat. 9,112,083	Pat. 9,159,888
Pat. 9,887,327	Pat. RE46,588	Pat. RE46,589	Pat. D718,725	Pat. D746,240
Pat. D790,486				

XLamp® XB-E and XB-G High Voltage LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 7,808,013	Pat. 7,858,998	Pat. 7,943,952	Pat. 8,039,859	Pat. 8,167,463
Pat. 8,608,349	Pat. 8,622,582	Pat. 8,957,430	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,093,616	Pat. 9,112,083	Pat. Re46,588	Pat. Re46,589	Pat. D615,504
Pat. D711,840				

XLamp® XD-16 Components

These products are covered by the respective patents listed below:

Pat. 9,640,737 Pat. 9,660,153 Pat. 9,673,363

XLamp® XH-B and XH-G LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313 Pat. 6,958,497 Pat. 7,312,474 Pat. 7,446,345 Pat. 7,692,182
Pat. 9,054,253 Pat. 9,112,083 Pat. 9,780,268 Pat. RE46,588 Pat. RE46,589
Pat. D738,832

XLamp® XHP35 LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313 Pat. 6,657,236 Pat. 6,958,497 Pat. 7,312,474 Pat. 7,335,920
Pat. 7,446,345 Pat. 7,473,938 Pat. 7,692,182 Pat. 7,704,763 Pat. 7,808,013
Pat. 7,858,998 Pat. 8,039,859 Pat. 8,167,463 Pat. 8,608,349 Pat. 8,622,582
Pat. 8,766,296 Pat. 8,803,201 Pat. 8,866,169 Pat. 8,896,008 Pat. 9,012,938
Pat. 9,054,253 Pat. 9,070,850 Pat. 9,105,824 Pat. 9,112,083 Pat. 9,159,888
Pat. 9,728,676 Pat. 9,887,327 Pat. RE46,588 Pat. RE46,589 Pat. D718,725
Pat. D746,240 Pat. D790,486 Pat. D826,871

XLamp® XHP35.2 LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313 Pat. 6,657,236 Pat. 6,958,497 Pat. 7,312,474 Pat. 7,335,920
Pat. 7,446,345 Pat. 7,473,938 Pat. 7,692,182 Pat. 7,704,763 Pat. 7,808,013
Pat. 7,858,998 Pat. 8,039,859 Pat. 8,167,463 Pat. 8,608,349 Pat. 8,622,582
Pat. 8,766,296 Pat. 8,803,201 Pat. 8,866,169 Pat. 8,896,008 Pat. 9,012,938
Pat. 9,054,253 Pat. 9,070,850 Pat. 9,105,824 Pat. 9,112,083 Pat. 9,159,888
Pat. 9,728,676 Pat. 9,887,327 Pat. RE46,588 Pat. RE46,589 Pat. D718,725
Pat. D746,240 Pat. D790,486 Pat. D826,871

XLamp® XHP50 and XHP70 LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 8,039,859	Pat. 8,167,463	Pat. 8,608,349	Pat. 8,622,582	Pat. 8,766,296
Pat. 8,803,201	Pat. 8,896,008	Pat. 9,012,938	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,105,824	Pat. 9,112,083	Pat. 9,159,888	Pat. 9,887,327	Pat. RE46,588
Pat. RE46,589	Pat. D718,725	Pat. D746,240	Pat. D790,486	Pat. D826,871

XLamp® XHP50.2 and XHP70.2 LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,608,349	Pat. 8,622,582
Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850	Pat. 9,105,824
Pat. 9,112,083	Pat. 9,159,888	Pat. 9,640,737	Pat. 9,660,153	Pat. 9,673,363
Pat. 9,754,926	Pat. 9,831,220	Pat. 9,887,327	Pat. RE46,588	Pat. RE46,589
Pat. D718,725	Pat. D746,240	Pat. D826,871		

XLamp® XM-L LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,608,349	Pat. 8,622,582
Pat. 8,696,159	Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,112,083	Pat. 9,159,888	Pat. 9,887,327	Pat. RE46,588	Pat. RE46,589
Pat. D615,504	Pat. D656,906	Pat. D671,661	Pat. D691,569	Pat. D709,464

XLamp® XM-L EasyWhite LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,608,349	Pat. 8,622,582
Pat. 8,696,159	Pat. 8,766,296	Pat. 8,896,008	Pat. 9,070,850	Pat. 9,054,253
Pat. 9,112,083	Pat. 9,159,888	Pat. 9,627,361	Pat. RE46,588	Pat. RE46,589
Pat. D615,504	Pat. D656,906	Pat. D671,661	Pat. D691,569	Pat. D709,464

XLamp® XM-L2 LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,608,349	Pat. 8,622,582
Pat. 8,696,159	Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,112,083	Pat. 9,159,888	Pat. RE46,588	Pat. RE46,589	Pat. D615,504
Pat. D656,906	Pat. D671,661	Pat. D691,569	Pat. D709,464	

XLamp® XM-L2 EasyWhite LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,608,349	Pat. 8,622,582
Pat. 8,696,159	Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,112,083	Pat. 9,159,888	Pat. RE46,588	Pat. RE46,589	Pat. D615,504
Pat. D656,906	Pat. D671,661	Pat. D691,569	Pat. D709,464	

XLamp® XM-L High-Voltage LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 7,808,013	Pat. 7,858,998	Pat. 7,943,952	Pat. 8,039,859	Pat. 8,167,463
Pat. 8,608,349	Pat. 8,622,582	Pat. 8,957,430	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,093,616	Pat. 9,112,083	Pat. RE46,588	Pat. RE46,589	Pat. D691,569
Pat. D615,504	Pat. D656,906	Pat. D671,661		

XLamp® XM-L Color LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 7,967,652	Pat. 8,167,463	Pat. 8,622,582	Pat. 8,608,349
Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850	Pat. 9,112,083
Pat. 9,159,888	Pat. RE46,588	Pat. RE46,589	Pat. D615,504	Pat. D656,906
Pat. D671,661	Pat. D691,569	Pat. D711,841		

XLamp® XP LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,455,909	Pat. 8,608,349
Pat. 8,622,582	Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,112,083	Pat. 9,159,888	Pat.RE46,588	Pat.RE46,589	Pat. D615,504
Pat. D656,906	Pat. D671,661			

XLamp® XP-C LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,455,909	Pat. 8,608,349
Pat. 8,622,582	Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,112,083	Pat. 9,159,888	Pat.RE46,588	Pat.RE46,589	Pat. D583,338
Pat. D593,968	Pat. D615,504	Pat. D656,906	Pat. D671,661	

XLamp® XP-E LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,455,909	Pat. 8,608,349
Pat. 8,622,582	Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,112,083	Pat. 9,159,888	Pat. 9,640,737*	Pat. 9,660,153*	Pat. 9,673,363*
Pat. RE46,588	Pat. RE46,589	Pat. D582,866	Pat. D602,450	Pat. D615,504
Pat. D656,906	Pat. D671,661			

**White Only*

XLamp® XP-E2 LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,455,909	Pat. 8,608,349
Pat. 8,622,582	Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,112,083	Pat. 9,159,888	Pat.RE46,588	Pat.RE46,589	Pat. D582,866
Pat. D602,450	Pat. D615,504	Pat. D656,906	Pat. D671,661	

XLamp® XP LED Components (red)

These products are covered by the respective patents listed below:

Pat. 7,808,013	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,455,909	Pat. 8,608,349
Pat. 8,622,582	Pat. 9,070,850	Pat.RE46,588	Pat.RE46,589	Pat. D615,504
Pat. D656,906	Pat. D671,661			

XLamp® XP-G LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,455,909	Pat. 8,608,349
Pat. 8,622,582	Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,112,083	Pat. 9,159,888	Pat.RE46,588	Pat.RE46,589	Pat. D615,504
Pat. D656,906	Pat. D671,661			

XLamp® XP-G2 LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,455,909	Pat. 8,608,349
Pat. 8,622,582	Pat. 8,766,296	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,112,083	Pat. 9,159,888	Pat.RE46,588	Pat.RE46,589	Pat. D615,504
Pat. D656,906	Pat. D671,661			

XLamp® XP-G3 LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,455,909	Pat. 8,608,349
Pat. 8,622,582	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850	Pat. 9,112,083
Pat. 9,159,888	Pat. 9,640,737	Pat. 9,660,153	Pat. 9,673,363	Pat.RE46,588
Pat.RE46,588	Pat.RE46,589	Pat. D615,504	Pat. D656,906	Pat. D671,661

XLamp® XP-L LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,455,909	Pat. 8,608,349
Pat. 8,622,582	Pat. 8,766,296	Pat. 8,803,201	Pat. 8,866,169	Pat. 8,896,008
Pat. 9,012,938	Pat. 9,054,253	Pat. 9,070,850	Pat. 9,105,824	Pat. 9,112,083
Pat. 9,159,888	Pat. 9,887,327	Pat.RE46,588	Pat.RE46,589	Pat. D718,725
Pat. D746,240	Pat. D790,486			

XLamp® XP-L2 LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,335,920
Pat. 7,446,345	Pat. 7,473,938	Pat. 7,692,182	Pat. 7,704,763	Pat. 7,808,013
Pat. 7,858,998	Pat. 8,039,859	Pat. 8,167,463	Pat. 8,455,909	Pat. 8,608,349
Pat. 8,622,582	Pat. 8,866,169	Pat. 8,896,008	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,105,824	Pat. 9,112,083	Pat. 9,159,888	Pat. 9,640,737	Pat. 9,660,153
Pat. 9,673,363	Pat. 9,887,327	Pat.RE46,588	Pat.RE46,589	Pat. D718,725
Pat. D746,240	Pat. D790,486			

XLamp® XQ-A Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 7,808,013	Pat. 8,608,349	Pat. 8,766,296	Pat. 8,803,201	Pat. 8,866,169
Pat. 9,012,938	Pat. 9,054,253	Pat. 9,105,824	Pat. 9,112,083	Pat. 9,887,327
Pat.RE46,588	Pat.RE46,589	Pat. D718,725	Pat. D746,240	

XLamp® XQ-B and XQ-D LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 7,943,952	Pat. 8,039,859	Pat. 8,608,349	Pat. 9,048,396	Pat. 9,054,253
Pat. 9,112,083	Pat. 9,640,737	Pat. 9,660,153	Pat. 9,673,363	Pat. 9,754,926*
Pat.RE46,588	Pat. RE46,589	Pat. D718,258	Pat. D711,840	

**XQ-B Royal Blue Only*

XLamp® XQ-E Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 7,808,013	Pat. 8,039,859	Pat. 8,608,349	Pat. 8,766,296	Pat. 8,803,201*
Pat. 8,866,169	Pat. 9,012,938*	Pat. 9,054,253	Pat. 9,105,824*	Pat. 9,112,083
Pat. 9,887,327	Pat.RE46,588	Pat.RE46,589	Pat. D718,725	Pat. D746,240
Pat. D783,547*	Pat. D790,486			

**high intensity only*

XLamp® XR LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,264,378	Pat. 7,312,474
Pat. 7,335,920	Pat. 7,446,345	Pat. 7,473,938	Pat. 7,612,383	Pat. 7,659,551
Pat. 7,692,182	Pat. 7,704,763	Pat. 7,775,685	Pat. 7,808,013	Pat. 7,976,186
Pat. 8,167,463	Pat. 8,188,488	Pat. 8,608,349	Pat. 8,622,582	Pat. 8,766,296
Pat. 8,896,008	Pat. 9,054,253	Pat. 9,112,083	Pat. 9,159,888	Pat.RE46,588
Pat.RE46,589	Pat. D591,697	Pat. D640,645	Pat. D681,573	Pat. D623,607

XLamp® XR-C LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,264,378	Pat. 7,312,474
Pat. 7,335,920	Pat. 7,446,345	Pat. 7,473,938	Pat. 7,612,383	Pat. 7,659,551
Pat. 7,692,182	Pat. 7,704,763	Pat. 7,775,685	Pat. 7,808,013	Pat. 7,976,186
Pat. 8,167,463	Pat. 8,188,488	Pat. 8,608,349	Pat. 8,766,296	Pat. 8,896,008
Pat. 9,054,253	Pat. 9,112,083	Pat. 9,159,888	Pat.RE46,588	Pat.RE46,589
Pat. D583,338	Pat. D591,697	Pat. D593,968	Pat. D640,645	Pat. D681,573
Pat. D623,607				

XLamp® XR-E LED Components (blue, green and white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,657,236	Pat. 6,958,497	Pat. 7,264,378	Pat. 7,312,474
Pat. 7,335,920	Pat. 7,446,345	Pat. 7,473,938	Pat. 7,612,383	Pat. 7,659,551
Pat. 7,692,182	Pat. 7,704,763	Pat. 7,775,685	Pat. 7,808,013	Pat. 7,976,186
Pat. 8,167,463	Pat. 8,188,488	Pat. 8,608,349	Pat. 8,766,296	Pat. 8,896,008
Pat. 9,054,253	Pat. 9,112,083	Pat. 9,159,888	Pat.RE46,588	Pat.RE46,589
Pat. D582,866	Pat. D591,697	Pat. D602,450	Pat. D640,645	Pat. D681,573
Pat. D623,607				

XLamp® XR LED Components (red)

These products are covered by the respective patents listed below:

Pat. 7,264,378	Pat. 7,612,383	Pat. 7,659,551	Pat. 7,775,685	Pat. 7,976,186
Pat. 8,188,488	Pat.RE46,588	Pat.RE46,589	Pat. D591,697	Pat. D640,645
Pat. D681,573				

XLamp® XT-E LED Components (white)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 7,808,013	Pat. 7,858,998	Pat. 7,943,952	Pat. 8,039,859	Pat. 8,167,463
Pat. 8,608,349	Pat. 8,622,582	Pat. 9,054,253	Pat. 9,070,850	Pat. 9,112,083
Pat. 9,640,737	Pat. 9,660,153	Pat. 9,673,363	Pat.RE46,588	Pat. RE46,589
Pat. D615,504	Pat.D656,906	Pat. D671,661	Pat. D691,973	

XLamp® XT-E LED Components (royal blue)

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 7,808,013	Pat. 7,858,998	Pat. 8,167,463	Pat. 8,608,349	Pat. 8,622,582
Pat. 9,054,253	Pat. 9,070,850	Pat. 9,112,083	Pat. 9,640,737	Pat. 9,660,153
Pat. 9,673,363	Pat.RE46,588	Pat.RE46,589	Pat. D615,504	Pat. D656,906
Pat. D671,661	Pat. D691,973			

XLamp® XT-E High-Voltage LED Components

These products are covered by the respective patents listed below:

Pat. 6,515,313	Pat. 6,958,497	Pat. 7,312,474	Pat. 7,446,345	Pat. 7,692,182
Pat. 7,808,013	Pat. 7,858,998	Pat. 7,943,952	Pat. 8,039,859	Pat. 8,167,463
Pat. 8,608,349	Pat. 8,622,582	Pat. 8,608,349	Pat. 9,054,253	Pat. 9,070,850
Pat. 9,112,083	Pat.RE46,588	Pat.RE46,589	Pat. D615,504	Pat. D656,906
Pat. D671,661				